

### Week 3 Web Update

We have had a busy week, with cooperative weather and lots of dolphins around us. On Saturday, 8/18, the seas and winds finally calmed down and we were able to do a practice set, to run through our entire operation once before actually catching dolphins. The practice set went well, and we were now ready to start our research. Within an hour after returning to the ship, we located a suitable school of spotted dolphins, and by early afternoon we had successfully captured our first dolphins! The handling and tagging went smoothly, and we deployed one satellite tag (which will provide us with a longer-term record of the animal's movement during the next few months), one radio tag with a time-velocity-depth recorder (TVDR; this is how we track animals in real time and monitor their diving and swimming behavior), and one roto-tag (a small plastic tag that is commonly used to mark dolphins). All dolphins (and the tuna swimming beneath them) were safely released after the sampling and tagging was complete. Then, the round-the-clock tracking marathon began! Radio-tracking consists of listening to a lot of static through uncomfortable headsets, waiting for occasional beeps as the animal surfaces and the tag is able to transmit. We have four antennas mounted on our ship's mast, facing forward, aft, left (port) and right (starboard). The relative signal strength for each direction displays on a cross-shaped light panel, allowing us to determine the direction of the signal, and to adjust our course as needed. We appear to have at least 5-6 miles range, and have been staying about 3-4 miles behind the dolphin -- close enough to avoid losing the signal, but far enough to avoid disturbing the animal.

After following the radio-tagged dolphin for two days, we attempted to recapture it on August 20. Although our target animal got away (this time!), we were able to sample nine more dolphins and attach five radio tags and four roto-tags. When we finished sampling and started the standard >backdown= procedure to release all dolphins, however, many of them seemed strangely reluctant to leave. We eventually were able to >back out= or hand-release all of these dolphins, but one previously released dolphin apparently tried to return into the net and became entangled from the outside. Sadly, we were not able to reach this animal in time to rescue it. After the set, we evaluated potential steps we could take to reduce the risk of such problems in future sets, and adjusted our protocol accordingly. We then resumed tracking one of our newly radio-tagged animals. After tracking it for the next two days, we were successful in recapturing and sampling this radio-tagged dolphin in our third set on August 22. We also deployed one more satellite tag and two radio tags on additional animals. All dolphins were safely released after sampling. This has brought our total number of sampled dolphins to 15, including one recaptured individual. We will continue our sampling and tagging operations as opportunities and weather allow. Stay tuned....